

REMARKS

The present application was filed on September 26, 2003 with claims 1-15. Claims 1, 11-13 and 15 are independent claims.

In the outstanding Office Action, the Examiner: (i) rejected claims 1-7, 11-13 and 15 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,522,195 to Watanabe et al. (hereinafter “Watanabe”); (ii) rejected claims 9, 10 and 14 under 35 U.S.C. §103(a) as being unpatentable over Watanabe; and (iii) indicated allowable subject matter in claim 8.

In this response, Applicants have amended claims 1, 8, 11, 13 and 15. Dependent claim 8 has been rewritten in independent form, given the acknowledgment by the Examiner of allowable subject matter. Independent claims 1, 11, 13 and 15 have been amended to further clarify the subject matter of the invention. More particularly, Applicants have amended such independent claims to indicate that in the bypass mode operation, a series output matching element is shorted. Support for the amendment may be found throughout the present application, for example, see FIGs. 2 and 3, and page 8, lines 11-20.

Advantageously, by shorting a series output matching element (e.g., by shorting out capacitor CM, as shown in the present application at FIGs. 2 and 3, and further described at page 8, lines 11-20), the bypass switch topology of the invention does not require any additional passive components to complete the output impedance match. In comparison, Watanabe does not short a series output matching element and requires additional passive components to complete the output impedance match. For example, see bypass circuit 22 of FIG. 1 of Watanabe which requires inductor 28 and 34 to complete the output impedance match. Further, as explained at column 3, lines 39-54, of Watanabe, selection of these passive elements is critical to the Watanabe LNA topology.

Furthermore, by shorting a series output matching element and thus not requiring any additional passive components to complete the output impedance match, the bypass switch topology of the invention is much smaller in area than Watanabe’s, and is therefore much more cost-effective.

Thus, for at least the above reasons, Applicants assert that independent claims 1, 11, 13 and 15 are patentable over Watanabe. Further, Applicants assert that dependent claims 2-7, 9, 10 and

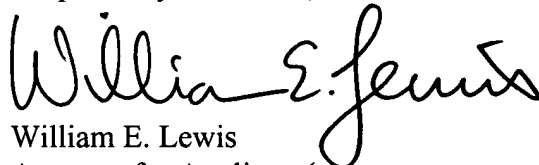
14 are patentable over Watanabe not only for the reasons given above, but also because such claims recite separately-patentable subject matter in their own right.

Regarding claim 12, Applicants assert that Watanabe fails to disclose that, in a bypass mode, “a load impedance is not modified by the output impedance matching network,” as recited in the claimed invention. Again, as explained above, FIGs. 2 and 3 of the present application illustrate how capacitor CM is shorted in the bypass mode and thus how no additional passive components are required to complete the output impedance match. Thus, in such a bypass mode, the load impedance is not modified by the output impedance matching network. Again, due at least to inductors 28 and 34 of the bypass switch in FIG. 1 of Watanabe, the load impedance is modified by the output impedance matching network.

Thus, for at least the above reasons, Applicants assert that independent claim 12 is also patentable over Watanabe.

In view of the above, Applicants believe that claims 1-15 are in condition for allowance, and respectfully request withdrawal of the §102(e) and §103(a) rejections.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "William E. Lewis", written in a cursive style.

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Date: March 22, 2005